

**Clinical Learning Experience (CLE) IN CRITICAL CARE (ICU – MED/SURG)**

**GENERAL**

The Critical Care - ICU (Med/Surg) CLE provides the resident with an opportunity to assess and treat patients with critical illness in a controlled environment. This is the best opportunity to gain experience in advanced procedures such as central line insertion and hemodynamic monitoring, as well as the use of many drugs for intravenous therapy.

**MEDICAL EXPERT**

1. To develop skills with clinical assessment of the critically ill/injured patient.
2. To demonstrate skilled physical exam.
3. To exhibit appropriate knowledge of multi-system disease.
4. To exhibit appropriate knowledge of diagnostics.
5. To exhibit appropriate knowledge of therapeutics.
6. To accurately identify problems in the critically ill.
7. To develop an approach to resuscitation situations.
8. Technical Skills – To develop technical skills in the following:
  - 8.1 Airway Management
  - 8.2 Mechanical ventilation management
  - 8.3 Hemodynamic monitoring and therapeutics
  - 8.4 Central vascular access
  - 8.5 Decontamination for toxicological problems
  - 8.6 Use of analgesics/anaesthesia and procedural sedation

**COMMUNICATOR AND COLLABORATOR**

1. To understand the roles and responsibilities within the critical care system.
2. To understand the importance of team work and collaboration with the critical care team and other consultants involved in critical care.
3. To learn various approaches to leadership in critical care events and in conflict resolution.
4. To understand how to communicate effectively with the family of acutely and critically ill/injured and patients.
5. To understand and demonstrate patient-centered orientation.
6. To involve patient & family in management plan.
7. To demonstrate integrity, honesty, and compassion.
8. To understand and demonstrate appropriate patient-physician boundaries.

**MANAGER**

1. To understand the appropriate management of time and resources in the critical care system and how expedient diagnosis and treatment relates to better outcomes.
2. To be aware of the availability, cost and limitations of hospital resources (equipment, personnel, bed availability) and understand how to manage resources.

3. To understand the role of pre-hospital services for the transport of critically ill/injured patients.
4. To recognize roles of, and interact effectively with other specialty consultants.
5. To demonstrate the ability to effectively work within a multi-disciplinary team.
6. To demonstrate the ability to effectively approach uncertainty and ambiguity.
7. To demonstrate team-based leadership skills.
8. To be aware of personal limitations and appropriately seeks assistance.
9. To follow through on commitments.
10. To understand the principles of regional trauma/disaster medicine.
11. To understand the principles of organ donation and procurement.

### **HEALTH ADVOCATE**

1. To understand and apply patient-centered care in the critically ill/injured patient.
2. To understand the role of ethics in treatment decisions in the critically ill/injured patient.
3. To understand the importance and role of support services in the critical care system including social work, clergy, physiotherapy and occupational therapy.
4. To understand the importance of cultural awareness and sensitivity in care of the critically ill/injured patient.
5. To demonstrate patient advocacy and respect for end-of-life issues.
6. To demonstrate the understanding of the principles of triage and appropriate resource allocation.
7. To appropriately use relevant community and hospital resources for discharged patients.

### **SCHOLAR**

1. To provide accurate and organized documentation of patient care.
2. To understand how to apply best practices in the management of the critically ill/injured patient by means of critical appraisal of the literature.
3. To demonstrate initiative and self-directed learning.
4. To effectively manage time for learning and patient care.
5. To teach junior learners effectively.
6. To participate and present in group learning events (rounds).
7. To effectively manage ICU human and physical resources.

### **Professional**

1. To be punctual, reliable, and consistent in the management of critically ill/injured patients.
2. To be empathetic and patient-centered in the care of the acutely injured patient.
3. To be respectful and professional in all interactions with the patient, family, trauma team, consultants and support staff within the hospital and within the critical care system.
4. To recognize the importance of behaving in an ethical and professional manner at all times.

### **APPENDIX I**

#### **i) Shock**

1. To anticipate, identify and characterize shock states based upon a detailed understanding of precipitants, clinical characteristics and pathophysiology.

2. To describe and implement a comprehensive strategy for the investigation, monitoring and goal directed management of shock.
3. To select and titrate vasoactive agents based on a detailed knowledge of their physiologic actions.
4. To select and administer volume expanding agents and blood products based on a detailed knowledge of relevant physiology, available options and current controversies.

ii) Sepsis

1. To identify the clinical features of sepsis and septic shock.
2. To select antibiotic therapy for septicemia (known or unknown cause) based on understanding of likely pathogens and their antimicrobial sensitivity.
3. To describe the known pathophysiology of septic shock.
4. To provide care of the critically ill patient supported by current guidelines and recent literature.

iii) Altered Level of Consciousness

1. To list, categorize and identify causes of depressed consciousness or coma. Correlate these conditions with a detailed knowledge of the physiologic and neuroanatomic nature of consciousness.
2. To demonstrate a highly organized approach to the concurrent resuscitation and initial investigation of patients with altered LOC/Coma.
3. To conduct a comprehensive clinical/laboratory evaluation for cause, based upon a detailed knowledge of common/uncommon precipitants and their distinguishing features.